

COLORADO SCHOOL OF MINES FACULTY SENATE MINUTES

March 4, 2003 - 2:00 PM

Hill Hall Room 300

ATTENDEES: Curtis, Dean, Dickerhoof, Eberhart, Frost, Harrison, Illangasekare, Navidi, Ross, and Thiry

APOLOGIES: Mitcham, Readey and Kee (on sabbatical Spring 2003)

VISITORS: Nigel Middleton, Vice President for Academic Affairs; Phil Romig, Dean of Graduate Studies and Research; and Eileen Poeter, Professor of Geology and Geological Engineering.

Senator Illangasekare was president pro tem for the meeting.

COMMENTS FROM VPAA MIDDLETON

- A. The Executive Committee agrees with the report from the Higher Learning Commission's critique that identified communication within the CSM community is in need of improvement.
- B. The recommendations from the Promotion and Tenure Committee have been received by the Vice President for Academic Affairs.
- C. Professional Masters in International Political Economy, Professional Masters of Mineral Exploration, and Professional Masters of Environmental Geochemistry were taken to the CSM Board of Trustees. A parallel endorsement for these degrees will be going to CCHE for their approval.
- D. An agreement will be signed to establishing Microphage as a "spin-off" company for technology transfer.
- E. The budget is still in a day-to-day state of flux. On the revenue side, the variable is how much the State will cut its appropriation to higher education for the next fiscal year. The amount that CSM can increase tuition is also subject to State approval. Bill Young, Director of Admissions, reports that CSM could have a freshmen class of 700 to 750 students next fall.

On the expenditure side, CSM still needs to cut \$1M from 2003 fiscal year base budget. CSM will dip into reserves to balance 2003 FY; but for 2004 FY, the cuts must come from the academic budget.

The financial model that was developed by a graduate student in Economics and Business is not valid because State funding is no longer coupled with student numbers.

COMMENTS FROM PHIL ROMIG, Dean of Graduate Studies and Research:

The following items were presented to the Senate for their endorsement.

- A. Alternative Tuition for Graduate Students - the following proposal was distributed:

Based on discussion at previous meetings, the rationale for this proposal is:

Allowing students to take additional credits would give us more flexibility in accommodating special needs. Charging additional tuition would discourage the practice and adhere to the principle of paying for value received.

We should continue to define full-time as 12 hours per semester for graduate students for several reasons:

- The committee that developed the new formula felt 12 hours was the right limit in principle.
- Our other requirements (such as 36 hours for the Master degree and 72 hours for the PhD) are based on that assumption.
- We have been lobbying with the CCHE (with 50% success so far) to use 12 hours per semester as the definition of an FTE for funding.

We should retain the plateau between 10 and 15 hours for non-thesis students in order to encourage more of our undergraduates to stay for a professional master degree or certificate.

Defining full-time (for tuition purposes) as 10-12 hours and allowing overloads of up to 3 hours at no charge, would accomplish all of the above goals.

Eliminating the need for special permission to exceed the limit also would eliminate the need for the Graduate School to "police" the students and eliminate hard feelings among students whose registration has been reduced unilaterally.

For these reasons, we recommend changing the first section on page 18 of the Bulletin as follows:

"The normal full load for graduate students is 12 credit hours per term, however to allow for variations in course sizes, scheduling, etc., any student taking 10 or more credit hours will be considered to be registered full-time. Special cases outlined below include first-year international students who must receive special instruction to improve their language skills, and students who have completed most of their credit-hour requirements and are working full-time on their thesis.

"Full-time graduate students may register for an overload of up to 3 credit hours (up to 15 credit hours total) per term at no increase in tuition. Students may register for more than 15 credit hours per term by paying additional tuition at the regular part-time rate for all hours over 15.

"To remain in good standing, non-thesis students must register continuously for a minimum of 3 hours of course credit each fall and spring semester. Summer registration is not required for non-thesis students to remain in good standing.

"To remain in good standing, thesis-based students must register continuously for a minimum of 4 credit hours each fall and spring semester. Students who continue to work on degree programs and utilize CSM facilities during the summer must register for a minimum of 3 credit hours. Students registered during the summer must pay full summer fees.

"Candidates for thesis-based degrees may not use more than 12 credit hours per semester in determining eligibility for reduced thesis registration as described below."

B. Master Degree Structure

THE PROBLEM

Based on discussions with representatives of both the Board and the CCHE they appear to be asking two questions:

Do we provide degrees that optimally meet the needs of all of our clients?

These include young people interested in academic or professional careers, young people seeking to become more competitive in the job market, working professionals, and employers. The CCHE has a special interest in degrees that contribute to the economy by meeting the needs of employers, and the Board is particularly interested in the needs of our traditional industries and professions.

Is there a foundation of integrity and consistency underlying our degree structure?

In other words, is it clear to everyone what student commitments and accomplishments are implied by each of our degree titles?

The answer to either question is not unequivocally "yes" at the present time. We do not offer professional outreach program comparable to those of many other universities, which implies that some potential clients are not being served. A number of people have expressed confusion about the distinctions between our degrees, based in part on the fact that we offer 42 degrees in 6 different categories:

17 - Master of Science (thesis) degrees

- 7 -Master of Science (non-thesis) degrees
- 7 - Master of Engineering (thesis) degrees
- 4 -Master of Engineering (non-thesis) degrees
- 1 - (soon to be 4) Professional Master (non-thesis) degree
- 6 -Professional Degree (non-thesis) degrees

Not only do we give the same degree with both thesis and non-thesis options, but in some cases different degrees have essentially the same requirements. For example, in cases where we have a Professional Degree, a Master of Engineering and a Master of Science (in Engineering) in the same field, the differences between the three degrees are not obvious to many outside the School.

Although there are strong arguments for institutional standards, departments and divisions have made it clear that different disciplines follow different conventions. For example, in some fields (such as geology and geophysics), few if any universities offer non-thesis Master of Science degrees. In mathematics, on the other hand, Graeme Fairweather claims that almost all MS degrees are non-thesis. Our challenge is to develop institutional standards which allow a positive answer to the questions above while not making Mines too much of an outlier relative to national norms.

DISCUSSION

A different way of characterizing the distinctions between our degrees has emerged from these discussions. Rather than thesis vs. non-thesis, the important factors appear to be:

The main objective of some of our Master programs is similar to that of the undergraduate degree -**the maturation of the whole person**. Through resident instruction and personal mentoring, we strive to build a foundation of advanced knowledge while, at the same time, developing the qualities that will allow graduates to leave Mines poised for leadership in their chosen fields.

Other programs have the equally-valuable but very-different goal of providing career-oriented skills and knowledge as quickly, efficiently and conveniently as possible. Students are presumed to have received their maturation experiences in other ways, and the curriculum might be delivered in a variety of instructional modes both on and off campus.

PROPOSAL

We propose to distinguish between two categories of degrees on the basis of these two guidelines. MS and ME degrees would be restricted to the first category, and the second category would include all professional Master degrees. To that end, we request Graduate Council adoption of the following institutional degree requirements:

Master of Science and Master of Engineering degrees

Non-thesis programs - minimum requirements.

- Each degree program shall require a minimum of 36 total credit hours.
- Each program must include research or design experience supervised by CSM faculty.
- No more than 9 hours may be transfer credit (which may include CSM distance learning courses).
- All credits except transfer credits must be earned on campus.

Thesis-based programs will include all of the above requirements plus successful defense of a thesis.

Master of Engineering degrees will include the additional requirement that candidates either must have a Bachelor degree in engineering or must take at least 16 hours of engineering courses as part of their Master program. The title on the diploma will be "Master of Science" or "Master of Engineering"

The transcript will continue to indicate whether the program was non-thesis or thesis-based.

Professional Master degrees

Minimum requirements for all programs

- Each degree program will require a minimum of 36 total credit hours.
- Up to six hours may be project credits done on the job as an employee or graduate intern. The project proposal and final report must be approved by the CSM faculty advisor, but direct supervision may be provided by the employer.
- Up to 15 hours may be transfer credit (which may include CSM distance learning courses).
- At least 15 credits must be earned on campus.

The title on the diploma will be "Master of <descriptive>" or "Professional Master of <descriptive>"

Other proposed changes

If the above requirements are approved, then existing Professional Degrees would be eliminated or changed to professional Master degrees. Departments or divisions that have MS and ME degrees in the same subject would be required either to eliminate one or to include a clear statement in the Bulletin of the differences between them.

C. Name change for Individualized, Interdisciplinary degree

The degree title presently approved for use on diplomas for individualized interdisciplinary degrees is of the form:

Doctor of Philosophy - Geophysics and Petroleum Engineering

Several department heads and division directors have expressed a concern that this implies that the individual has satisfied all of the degree requirements of both programs. However, the policy and procedures approved by the Graduate Council and the Board allow each interdisciplinary committee to develop requirements that are individualized for each student. Therefore, the department heads and division directors feel that the degree title is misleading.

To address their concern, I propose that the Graduate Council endorse the use of the following degree titles for the IIGP degrees:

Doctor of Philosophy - Interdisciplinary

Master of Science - Interdisciplinary Master of Engineering - Interdisciplinary with the areas of specialty listed on the student's transcript.

Geological Engineering Combined BS-MS Degree - Courses to be Double-Counted

This MEMO is a request to the graduate council to approve certain courses to be counted for both the BS and MS degrees in Geological Engineering (GE) for students pursuing a combined BS-MS degree in GE. The University requirements for a combined degree are listed on pages 35 and 36 of the 2002-2003 Graduate Bulletin.

Note: The following tracks in GE have existed for many years: Minerals Exploration (BS and MS), Ground Water Engineering (BS and MS), Engineering Geology (BS and MS), Petroleum Exploration (BS). The courses suggested below would be appropriate for "double-counting" in all three of the tracks that are available in the GE Master's degree.

Courses recommended to be double-counted

GEGN 403 Mineral Exploration Design

GEGN 439 Multi-disciplinary Petroleum Design

GEGN 469 Engineering Geology Design

GEGN 470 Ground Water Engineering Design

D. Graduate Internship Program Proposal

President Trefny promised NREL that CSM would develop a graduate internship program for students who are doing research at NREL under the direct supervision of NREL employees and NREL since has asked that the program be expanded to include undergraduate students. Because of the limited involvement of Mines faculty and resources, he agreed to reduce the overhead on the internships to something in the range of 8%-12%. Of course, the agreement we reach with NREL must be made available to other potential sponsors under the same terms and conditions.

At their 5 Feb 03 meeting, the Graduate Council considered a proposed internship program similar to that outlined below. The Graduate Council chose not to act on it because of concerns (expressed by Reuben Collins) about what they perceived as NREL "abuses" of the current program. Following that meeting, Reuben and I agreed that the NREL activities need attention, but it may not be appropriate to try to fix a specific problem with a general policy. Therefore, I am recommending that we move forward with this policy and work separately with Reuben (and others including Pres. Trefny) to improve the NREL relationship.

The current NREL agreement expired January 31, and students will not be paid until a new contract is in place. The Department of Energy is insisting that we adopt an internship policy and include it as part

of the contract before they will approve the renewal contract. Therefore, I recommend that you approve the attached institutional policy governing graduate student internships.

CSM RESEARCH INTERNSHIP POLICY

External sponsors may support research and design projects by CSM students through Graduate or Undergraduate Research Fellowships (RF), Research Assistantships (RA) or Research Internships (RI). RF and RA appointments are for work done primarily on campus or under the direct supervision of a CSM faculty member, and they will continue to be governed by the regular research contract policies and procedures. RI appointments are for work done primarily at the sponsor's location and under the sponsor's supervision, and they will be governed by the following policies and procedures:

The sponsor may be any outside entity (corporation, government agency, foreign government) which does business in areas in which CSM also is active.

The sponsor will select the students to which internships are to be given. The sponsor may advertise the opportunity directly to students or may request that CSM advertise the opportunity and provide a list of applicants. The sponsor may consult with CSM faculty in evaluating applicants, but the sponsor is responsible for the final selection.

The Research Intern's work will be done primarily at the sponsor's location, and the sponsor will assign a supervisor to direct that work.

Research interns must register for at least 4 hours of research, thesis or co-op credit as appropriate. With the approval of their academic advisor and their sponsor supervisor, they may register for additional credits. They are not required to be registered full-time unless they are international students who are required by INS to be working on their degree programs full-time. Those students must meet CSM's regular standards for full-time registration.

Each Research Internship must be approved by the student's academic advisor and the faculty member who will be the instructor of record for the research, thesis or co-op credits. That approval must include certification that the Internship work is suitable for the academic credit to be earned. At the end of each semester, each Intern must submit a report summarizing her or his accomplishments under the Internship, and that report will be the basis for the student's grade in the research, thesis or co-op credits.

The standards for minimum compensation for RI appointments will be the same as those for Research Fellows. This includes stipends, fees, insurance and tuition for all credits for which the students are registered.

If a Research Intern is a candidate for a research-based graduate degree at CSM, and if the work done under the internship will be the basis for the student's thesis, then the supervisor must hold an adjunct faculty appointment at CSM and be appointed as the student's co-advisor. In such cases, the supervisor must have the appropriate qualifications for such an appointment and must agree to carry out the academic responsibilities associated with the appointment; the student's home department or division faculty must recommend the appointment, and the department head or division director and VPAA must approve the appointment. Except in special cases, the adjunct appointment will not include compensation from CSM.

Sponsors will contract with CSM to fund research internships through the Office of Research Services using the same policies and procedures that apply to other research contracts. For the Internship portion of the contract only, the indirect charge will be 10% of the stipend. When internships are part of larger projects, this may be accomplished by cost sharing the difference between 10% and the project indirect rate as set by CSM's regular contracting policies.

The Senate wanted to study these issues further, and therefore, will make a decision at the next Senate meeting.

APPROVAL OF THE MINUTES: The minutes of the February 4, 2003 Faculty Senate meeting were approved.

COMMENTS FROM Eileen Poeter, Chair Mines Summit: Financial Challenges Opportunity:

The Summit will be April 9th from 5:00pm to 9:00pm. The issues will be posted on the Senate web page. The Committee would like one Senator involved in each issue group. There will be a information package for each group. As dinner will be served reservations are requested but not required.

COMMITTEE REPORTS:

A. Committee on Committees (Harrison)

1. Handbook Committee - A **motion** was made by Ross and seconded by Frost to nominate John Speer to immediately replace Eul Pang, (who is on sabbatical Spring 2003) whose term ends May 2003 on the Handbook Committee. In addition Speer would serve a complete three-year term beginning August 2003 and ending May 2006. The motion was passed unanimously. Readey will forward this nomination to VPAA Middleton.
2. Senate Representatives to University Committees – A **motion** was made by Dean, seconded by Dickerhoof and passed unanimously by the Senate to have a Senator as a member who serves as a representative of the faculty. The sole purpose of this request is to facilitate communication between the faculty, represented by the Senate, and the respective committees as follows:
 - a. *Budget Committee*. Currently, committee membership is three full-time faculty members. The Senate proposes that one additional full-time faculty member be appointed who is a Senator, and who will serve a one-year renewable term.
 - b. *Undergraduate Student Affairs Committee*. Currently, committee membership is four full-time faculty members. The Senate proposes that one of these four faculty shall be a Senator, who will serve a one-year renewable term.
 - c. *Calendar Committee*. Currently, committee membership is two full-time faculty members. The Senate proposes that one additional fulltime faculty member be appointed who is a senator, and who will serve a one-year renewable term.

B. Handbook Committee (Ross) The following has been removed from the proposed changes to the Faculty Handbook.

4.7.4 Cross-Appointments

Cross-appointments or courtesy appointments, may be made with the written approval of the cross-appointed faculty member, the faculty member's primary (or home) department/division, the secondary (or appointing) department/division, and the VPAA. The purpose of cross-appointments is to formally recognize the contributions of a faculty member to another department/division and to encourage the exchange of ideas and professional collaboration between departments/divisions. A cross-appointment shall be limited in duration, subject to periodic review, and renewable for additional terms with the written approval of the parties who initially approved the arrangement. The honorary title of "Faculty Affiliate" used in conjunction with the name of the secondary department/ division shall be used to describe a cross-appointment. Other characteristics and limitations of cross-appointments shall include: (a) a faculty member shall not hold more than two cross-appointments simultaneously; (b) a cross-appointed faculty member may claim appropriate credit for the appointment on his or her Faculty Data Sheet, although the secondary department/division shall play no role in tenure evaluations, promotion evaluations, or annual performance reviews; (c) a cross appointed faculty member may serve on faculty committees of the secondary department/ division, when appropriate; (d) a cross-appointed faculty member may serve on thesis committees of the secondary department/division, when appropriate, without increasing thesis committee size; and (e) secondary department/division recruiting materials may appropriately publicize its affiliation with a cross-appointed faculty member.

Ross disagrees with the Handbook Committees action for the following reasons:

A case for cross appointments of tenure-line at CSM

Background

Many institutions have a system of appointing a faculty member, who already has a primary locus of appointment, to a secondary department. Unless otherwise specified, these secondary appointments are non-salaried and are usually subject to regular review and renewal. The secondary department has no role in evaluation of the faculty member for tenure, promotion or annual performance review. These are known variously as "cross-appointments", "zero-time joint appointments" or "courtesy appointments".

Rationale

We are a small institution. If we are to realize our full potential as a university, it is vital that interdepartmental collaborations be maximized. Anything that would tend to remove barriers between departments should be encouraged. Cross-appointments could have the following advantages:

1. a department/division has opportunity to recognize contributions of a CSM colleague;
2. a closer relationship encourages exchange of ideas, perhaps leading to additional collaborations in research and teaching;
3. the cross-appointed faculty member can serve on department/division committees when appropriate;
4. as a member of the department/division faculty, the cross-appointed member can serve on thesis committees without increasing the size of the committee;
5. with increased awareness of department/division assets, resources can be used more efficiently (i.e., with less duplication); and ,
6. department/division recruiting materials (brochures, websites) can list the cross-appointed faculty, giving a truer picture of the depth and breadth of the group.

Cost

Cost of such arrangements are minimal. It is possible that a cross-appointment system could be structured so that 'dummy' (zero-dollar) contracts are not necessary.

Handbook language Rules on appointment and review procedures could be flexible, giving departments/divisions leeway to tailor them to individual needs.

NEW BUSINESS:

A. De Santo's Open Letter to the Faculty –

This is an open letter to President Trefny and the Faculty.

It concerns the recent policy changes affecting retirement announced by the President. While I recognize the present financial circumstances of the school, as a near-retiree I feel obligated to comment on these policy changes.

Specifically, these changes are:

- (1) an end to the financial subsidy used to assist retirees in paying for health insurance and
- (2) an end to the PERA supplement to augment transitional faculty salaries.

The changes are being implemented to save money and superficially they seem to do this.

The original decisions to defray health care costs and to add the PERA contribution to a transitional salary were instituted as incentives to retire. I believe they worked well.

Removing them is a disincentive to retire.

Consider the following:

Anyone about to retire does so based partly on financial considerations. If near-retirees look at the large health care cost to be (now solely) incurred plus the lowered transitional salary they may decide to continue working full-time.

If they work full-time just one more year because of their cost considerations, I argue that the cost savings to the school would disappear. It may even wind up costing the school MORE money.

Of course, how would you know? The budgets for the health care and PERA payouts may go down as indicated, but full-time academic costs could rise. Is there a budget item entitled Delayed Retirement Costs?

It is helpful to remember that there are people in this equation. Not just people who make policy but also people who base their decisions on that policy.

If the policy changes, so might the decisions.

I offer this open letter to invite comment from all future retirees.

John A. DeSanto, Professor

Department of Mathematical and Computer Sciences

The Senators would like to discuss this issue in more detail at the next Senate Meeting.

The Senators requested that Readey call a special Senate meeting for March 11 as the next regularly scheduled meeting on March 18 is during spring break.

The meeting adjourned at 4:00 PM.